

| 54<br>GCT          | 108<br>ATG<br>M | 162<br>ATA<br>I | 216<br>ACC<br>T | 270<br>ATG<br>M | 324<br>GCA<br>A | 378<br>TAT<br>Y       |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------------|
| သည                 | TAC<br>Y        | ATT<br>I        | AAT             | GTC<br>V        | ${ m TTG}$      | CTC                   |
| ටවුව               | TGC             | CAC<br>H        | TGT<br>C        | TGT             | CTC<br>L        | GGA<br>G              |
| 45<br>AAC          | 99<br>TTC<br>F  | 153<br>TGG<br>W | 207<br>CAG<br>Q | 261<br>TTC<br>F | 315<br>CCC<br>P | 369<br>CCA<br>P       |
| r ggc A            | GCC<br>A        | ATT<br>I        |                 | TTC<br>F        |                 | ე<br>ე                |
| GCT                | GCG             | GCC             | ATA<br>I        | GCT             | AAT<br>N        | AGT<br>S              |
| 36<br>TCC GCT (    | 90<br>TTC<br>F  | 144<br>TTC<br>F | 198<br>CCT<br>P | 252<br>CAC<br>H | 306<br>CTC<br>L | 360<br>ATG<br>M       |
| TTC                | ACG             | TTC             | AAT<br>N        | ATC<br>I        | GGT<br>G        | GTG<br>V              |
| CCT                | TTC<br>F        | ATC<br>I        | AAG<br>K        | CTC             |                 | CCA<br>P              |
| 27<br>ACG          | 81<br>GCG<br>A  | 135<br>CTC<br>L | 189<br>TAC<br>Y | 243<br>TAC<br>Y |                 | 351<br>AGA<br>R       |
| GCG A              | ATG<br>M        | GCG             | GAT<br>D        | GAG<br>E        | CTT<br>L        | AGT<br>S              |
| CCI                | ವಿವಿ            | GCC             | ACT             | CCA<br>P        | TGG<br>W        | ATG<br>M              |
| 18<br>GGC          | 72<br>CCA       | 126<br>ACT<br>T | 180<br>AAG<br>K | 234<br>CTC<br>L | 288<br>GAG<br>E | 342<br>TAT<br>Y       |
| GAG                | TCC             | CTC<br>L        | CTG<br>L        | GTA<br>V        | GCA<br>A        | AGG<br>R              |
| CCA                | TCC             | CTG             | GAG<br>E        | CTT             | GCA             | TGG<br>W              |
| 9<br>TAC           | 63<br>TCC '     | 117<br>CTG<br>L | 171<br>GAT<br>D | 225<br>CCC<br>P | 279<br>TGT<br>C | 333<br>ATT TGG<br>I W |
| 9<br>G TTT TAC CCA | ၁၅၁             | GCG<br>A        | TYTY<br>F       | AAT<br>N        | CTT             | TAT CAT Y             |
| ග                  | ວອວ ວວວ         | CTG<br>L        | GCA             | CTG             | TTT<br>F        | TAT<br>Y              |

| 432<br>GGA<br>G             | 486<br>ATG<br>M           | 540<br>TAA      | 594<br>CCA | 648<br>TTT | 702<br>CAG   | 756<br>TGG | 810<br>ATG             |
|-----------------------------|---------------------------|-----------------|------------|------------|--------------|------------|------------------------|
| GAA<br>E                    | 9<br>9                    | AGT             | TGT        | TTT        | ACT          | CTC        | TGA                    |
| AAG<br>K                    | TAT<br>Y                  | TCC             | TCC        | TTA        | TAT          | TAC        | CTC                    |
| 423<br>CAG<br>Q             | 477<br>CTA<br>L           | 531<br>TGG      | 585<br>AGA | 639<br>TCC | 693<br>TGT   | 747<br>GAT | 801<br>ATC             |
| TGT                         | TAC<br>Y                  | AAT             | GCA        | GAC        | ATA          | AAT        | ATA                    |
| rat<br>Y                    | TAC<br>Y                  | AAG             | CCA        | AAT        | TTC          | TAA        | 792<br>ACA GCC         |
| 414<br>GCA 7<br>A           | 468<br>TTT<br>F           | 522<br>CAG      | 576<br>TAT | 630<br>AAA | 684<br>GTT   | 738<br>ATA | 792<br>ACA             |
| CTA<br>L                    | $\operatorname*{TTT}_{F}$ | ACA             | TTC        | TTA        | ACT          | TTA        | 783<br>ACT TCT TAA GGA |
| ATT<br>I                    | GCA                       | AAC             | GGA        | ACT        | AAG          | AAA        | TAA                    |
| 405<br>GAT<br>D             | 459<br>CTA<br>L           | 513<br>AAC      | 567<br>AAG | 621<br>GTT | 675<br>GGA   | 729<br>TAT | 783<br>TCT             |
| GCA<br>A                    | CTT<br>L                  | TAG             | ATG        | TCA        | TGT          | ACG        | ACT                    |
| AAT<br>N                    | TAT<br>Y                  | TCT             | CAA        | TGA        | GCT          | ATT        | TGC                    |
| 396<br>ATG<br>M             | 450<br>TTT<br>F           | 504<br>AGC<br>S | 558<br>CAC | 612<br>ATC | 666<br>T'T'T | 720<br>GGT | 774<br>ACT             |
| ATC<br>I                    | GCT                       | GTG<br>V        | AGC        | GGA        | ATT          | AAT        | TGA                    |
| ACC<br>T                    | TTA<br>L                  | TTG             | AAA        | TGT        | CAC          | TTA        | GTT                    |
| 387<br>ACA<br>T             | 441<br>AAA<br>K           | 495<br>GTT<br>V | 549<br>GCA | 603<br>GCC | 657<br>TTC   | 711<br>ATT | 765<br>CAG             |
| CCT<br>P                    | TGC                       | TAT<br>Y        | GTG CAT    | AGA GTA    | AAA TGT      | ATA AAG    | TGT TGA                |
| 387<br>GAC CCT ACA<br>D P T | TGG TGC<br>W C            | ATC<br>I        | GTG        | AGA        | AAA          | ATA        | TGT                    |

## FIGURE 1B

| 855 864<br>TTT ATA GGA ACT | 909<br>AAA TTA GCT GTA | 972<br>AAA CTT | 1026<br>ACA AAA        | 1080<br>GCA TGA                      | 1134<br>AAT TCT     | 1188<br>AGA ATG     | 1242<br>TAA GAA     | 1278 1287 1296<br>GTG GTA AGG GTA TTC TTA AGA ATT |
|----------------------------|------------------------|----------------|------------------------|--------------------------------------|---------------------|---------------------|---------------------|---|
| ATA                        | TTA                    | 999            | TVT                    | ATT                                  | TvT                 | TGA                 | TAT                 | TTA   |
| 855<br>TTT                 | 909<br>AAA             | 963<br>AGT     | 1017<br>'ACA           | 1071<br>TAT                          | 1125<br>' TGC       | 1179<br>TTG         | 1233<br>ACT         | 1287<br>TTC                                       |
| TTG                        | TAT                    | 963<br>ACT AGT | 1017<br>GAT ACA        | CTG                                  | 1125<br>ACT TGC     | 1179<br>TAC TTG     | 1233<br>ATT ACT     | 1<br>GTA  |
| 846<br>AAG CTT TTG         | 900<br>TCT AAT TAT     | CTG            |                        | JCC                                  |                     | AAT                 |                     | AAG   |
| 846<br>AAG                 | 900<br>TCT             |                | 1008<br>TAT            | 1062<br>TTA                          | 1116                |                     | 1224<br>TAA         | 1278<br>; GTA                                     |
| TGG                        |                        | 954<br>GTA TAT | 1008<br>TTA TAT ATG    | 1<br>ATA                             | 1116<br>AAT AAA TAT | 1170<br>ATG CTG     | 1224<br>TTG TAA GAC | 1<br>GTG  |
| CAT                        | ACA                    |                | TGA                    | TGA                                  |                     | TAT                 |                     | CTG   |
| 837<br>GTA CAT TGG         | 891<br>GAA ACA GTA     | 945<br>GAA AAT | 999<br>TCA TGT CGA TGA | 1053 1062<br>TTC GCT TGA ATA TTA TCC | 1107<br>CAT CAG AGT | 1161<br>AAA         | 1215<br>TGT TTT TAT | 1260<br>TAT GCT TAC TGT TCT AAT CTG               |
| CTA                        | ATT                    |                | TGT                    | 1<br>TTC                             | 1<br>CAT            | 1161<br>TAA AAA     | 1<br>TGT            | 1<br>TCT  |
| 828<br>ACT GTC CTA         | 882<br>GGT TTC ATT     | TGA AGT        | TCA                    | ညည                                   | TTC                 | ATA                 |                     | TGT   |
| 828<br>ACT                 | 882<br>GGT             | 936<br>TGA     | 990<br>CTG             | 1044<br>TTT                          | 1098<br>CCA TAT TTC |                     | 1206<br>TTT TAA ATG | 1260<br>'TAC                                      |
|                            | T'I'T                  | TTC            | CAT                    | 1<br>AAT                             | 1<br>CCA            | 1152<br>AAC ATG     | 1                   | 1<br>GCT  |
| TTA CTG                    | CAT TTT                | TGC            | CCT                    | 1044<br>GGG AAT TTT                  | TTC                 | GTA                 | CTA                 | TAT   |
| 819<br>TAA                 | 873<br>GCT             | 927<br>AGG     | 981<br>TTT             | 1035<br>, AGC                        |                     |                     | 1197<br>A AAG       | 1251<br>TAT                                       |
| 819<br>ATG CAT TAA         | AGG                    | GAT ATC        | 981<br>GGG TTT         | 1035<br>ATA AAA AGC                  | 1089<br>ATG AGA GAT | 1143<br>TAA GCA TAA | 1197<br>CAT TTA AAG | 1251<br>ATT GGT TAT                               |
| ATG                        | TGT AGG                | GAT            | CAT (                  | ATA                                  | ATG                 | TAA                 | CAT                 | ATT   |
|                            |                        |                |                        |                                      |                     |                     |                     |   |

## FIGURE 1C

1305 1314 1323 1332 1341 1350 TGC AGG TAC TAC AGA TTT TCA AAA CTG AAT GAG AGA AAA TTG TAT AAC CAT CCT

GCT GTT CCT TTA GTG CAA TAC AAT AAA ACT CTG AAA TTA AAA A 1386 1368 1359

## FIGURE 11

| 1          | MAFTFAAFCYMLALLLTAAL<br>MAFNFTAFTYIVALIGDAFL                                    | 1318847<br>GI 886769 |
|------------|---|----------------------|
| 21         | I F F A I W H I I A F D E L K T D Y K N   | 1318847              |
| 21         | I F F A I F H V I A F D E L K T D Y K N   | GI 886769            |
| 41         | PIDQCNTLNPLVLPEYLIHA  | 1318847              |
| 41         | PIDQCNSLNPLVLPEYLLHI  | GI 886769            |
| 61         | FFCVMFLCAAEWLTLGLNMP  | 1318847              |
| 61         | FLNLLFLFCGEWFSLCINIP  | GI 886769            |
| 81         | L L A Y H I W R Y M S R P V M S G P G L   | 1318847              |
| 81         | L I A Y H I W R Y K N R P V M S G P G L   | GI 886769            |
| 101<br>101 | Y D P T T I M N A D I L A Y C Q K E G W Y D P T T V L K T D T L Y R N M R E G W | 1318847<br>GI 886769 |
| 121        | CKLAFYLLAFFYYLYGMIYV  | 1318847              |
| 121        | IKLAVYLISFFYYIYGMVYS  | GI 886769            |
| 141        | LVSS  | 1318847              |
| 141        | LIST  | GI 886769            |

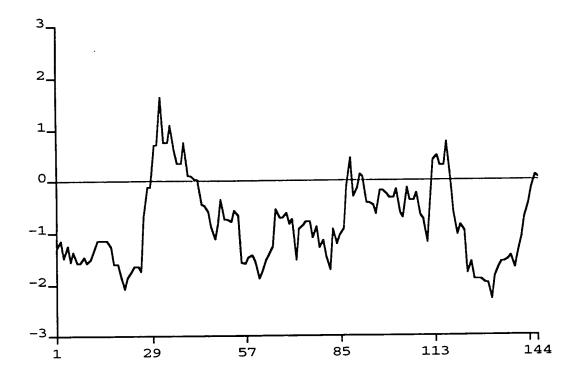


FIGURE 3A

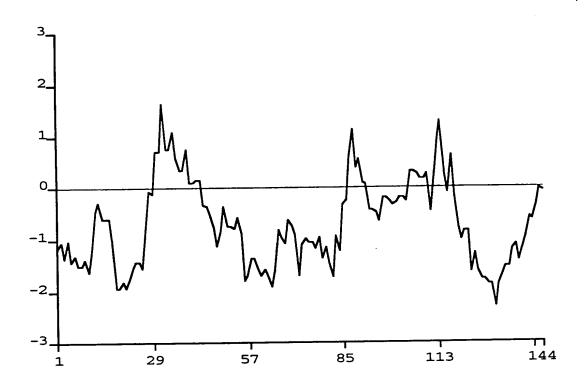


FIGURE 3B